South Star Cogeneration LLC is seeking approval from the CEC to construct and operate the South Star Cogeneration Project (South Star) in western Kern County approximately 35 miles southwest of Bakersfield, California. The South Star Project will consist of two substantially identical cogeneration plants, South Star I (Section 17, T32S, R23E) and South Star II (Section 7, T32S, R23E), that are located approximately 1.5 miles apart on contiguous Texaco California Inc. (TCI) property in the South Midway-Sunset Oilfield. The Application for Certification (AFC) presents an evaluation of the entire South Star Project in a manner to clearly indicate the environmental effects associated with each site and its related linear facilities.

South Star I includes the following project components shown on Figure 2-1:

- South Star I site:
- Replacement of poles and conductor for approximately 4.7 miles of existing 12.47 kV transmission line;
- 0.6 mile 115 kV transmission line extension to South Star I site;
- Alternative stand-alone 5.3 mile 115 kV transmission line;
- 3.6 miles of natural gas line (Kern-Mojave to Station 109 and natural gas line placed within TCI South Midway Utility Corridor Segment A);
- Approximately 2.4 mile Alternative Route 1 natural gas line; and
- Improved access road (Midoil Road to South Star I site).

South Star II includes the following project components as shown on Figure 2-1:

- South Star II site;
- 3.8 mile addition of second 115 kV circuit on proposed South Star I transmission line;
- 1.4 miles of natural gas line (placed within TCI South Midway Utility Corridor Segment B);
- Alternative aboveground Route 2 natural gas line; and
- Improved access road (Midoil Road to South Star II site).

This section inventories existing land uses in the vicinity of the proposed the South Star I and II Cogeneration Project (South Star) sites and discusses the potential land use impacts associated with the proposed projects. Land uses are described within one mile of the proposed

South Star I and II sites and within a quarter-mile of the corridor formed by the proposed transmission and natural gas pipeline routes associated with South Star I and II. The local, state, and federal jurisdictions potentially affected by South Star are identified, as are their respective plans, policies, laws, regulations (including zoning), and potentially sensitive land uses. Planned development and land use trends in the area of the South Star I and II sites are identified based on currently available development plans. Reasonably foreseeable future development projects within the affected area are noted, and the potential land use impacts associated with South Star I and II are assessed. The conformance of South Star I and II with local plans and regulations and the compatibility of South Star I and II with general land uses in the area is evaluated. Where appropriate, mitigation measures are proposed to reduce the potential land use impacts to acceptable levels.

The land use issues for the proposed South Star I and II sites have been identified and evaluated based on on-site reconnaissance surveys, a review of current U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps, aerial photography, a review of local land use ordinances, and a review of the land use goals and policies identified in the Kern County and San Luis Obispo County General Plans, and associated maps, which are cited throughout this section.

Land uses are controlled and regulated using a complex system of plans, policies, goals, and ordinances adopted by the various jurisdictions with authority over land uses in the area of the proposed South Star I and II Project sites. The general plan is the broadest planning document in scope for each county; it defines large-scale planned development patterns over a relatively long time frame. In unincorporated areas of Kern County and San Luis Obispo County, such as the location of the proposed South Star I and II Project sites, the Kern County Zoning Ordinance and San Luis Obispo County Land Use Ordinance are used to implement the objectives of the respective General Plans. The Zoning Ordinance and the Land Use Ordinance provide detailed specifications for allowable development (e.g., density, lot size, height, setback, subdivisions, etc.). Other regulations governing development include grading and subdivision ordinances and building codes.

8.4.1 Affected Environment

The affected environment of a project is defined by the California Energy Commission (CEC) as the study area boundary. For the proposed South Star I and II Project sites, the affected environment includes, but is not limited to, the territory within one mile of the South Star I and II facility sites and all lands within a quarter-mile of the proposed transmission and natural gas pipeline routes associated with South Star I and II. The zoning districts in the affected environment are shown on Figure 8.4-1. The existing transmission lines within one mile of the proposed South Star I and II Project sites are discussed in Section 6.0.

Governmental jurisdictions within the affected environment include Kern County, San Luis Obispo County, and the Bureau of Land Management (BLM), as shown on Figure 8.4-2.

Figure 8.4-3 identifies both existing and potentially sensitive land uses in the affected environment. Potentially sensitive land uses include recreational and religious sites, agricultural areas, schools, churches, health care facilities, parks, commercial and residential areas, airports and landing strips, and radar sites. Sensitive land uses can also include cultural and historical sites as well as natural scenic areas. See Section 8.3 (Cultural Resources) and Section 8.11 (Visual Resources) for assessments of these environmental areas. Table 8.4-1 summarizes the land uses identified on Figure 8.4-3.

Section 8.9 (Agriculture and Soils) describes the proximity of prime or unique farmland, as designated by the Natural Resources Conservation District. Section 8.9 also addresses Farmlands of Statewide Importance, as designated by the California Department of Conservation, and any potential project-related impacts on such lands. The affected environment is discussed in Section 8.4.3 by project component. Topics addressed include existing and proposed land uses, sensitive land uses, jurisdictions and associated land use plans (i.e., general plans), zoning, subdivision, and the general plan goals, policies, and implementation guiding development at the South Star I and II Project sites. Land ownership patterns are discussed in accordance with the CEC Guidelines (CEC, 1997).

8.4.2 Land Use Plans and Policies

8.4.2.1 City and County

As the proposed locations of South Star I and II and associated transmission and natural gas routes are within unincorporated areas of Kern County and San Luis Obispo County, no applicable city land use plans or policies have been identified for the proposed South Star I and II Project sites.

The Kern County General Plan includes specific policies intended to preserve and enhance existing development and to provide for orderly and appropriate new development to meet the needs of the area for the next 20 years (Kern County, 1982 [1994]). The Kern County General Plan has ten elements: land use, open space, conservation, recreation, circulation, housing, noise, seismic safety, public services and facilities, and energy. Each element contains goals, policies, and implementation measures pertinent to proposed development. These policies are summarized in Table 8.4-2. Zoning, subdivision approvals, and other regulations and actions must be consistent with the General Plan.

The San Luis Obispo County General Plan also includes specific policies intended to ensure appropriate development in unincorporated areas of San Luis Obispo County (San Luis Obispo County, 1980c [1999]). Its General Plan has twelve elements: land use, conservation, circulation, open space, housing, noise, safety, recreation, historic, esthetic, and offshore energy. Each element contains goals, policies, and implementation measures pertinent to proposed development. Reference will be made to the Land Use Element that covers the inland portions of San Luis Obispo County including the Shandon/Carrizo Area Plan where South Star is proposed. These policies are also summarized in Table 8.4-2. As with Kern County, zoning, subdivision approvals, and other regulations and actions must be consistent with the General Plan.

The land use designations described in the Kern County and San Luis Obispo County General Plans that are located within the affected environment are summarized in Table 8.4-3. Each General Plan divides all unincorporated lands in their respective County into specific designations and includes provisions specifying acceptable uses. The Kern County Zoning

Ordinance and the San Luis Obispo County Land Use Ordinance specify the zoning districts and development standards for uses within unincorporated areas.

The Kern County Zoning Ordinance and the San Luis Obispo County Land Use Ordinance each consist of both text and maps that divide all unincorporated lands in their respective county into specific zoning districts that specify allowable uses and development standards (see Figure 8.4-2). Table 8.4-4 depicts the actual zoning designations by project component. Energy-related uses and facilities are allowed in a broad range of districts. Energy facilities may be permitted by right, conditional use permit, or under special regulatory controls. If a use is allowed by right, no permit other than a building or grading permit, is typically required. Conditional use permits are discretionary permits; in most cases they are reviewed and approved by the Board of Zoning Adjustment in Kern County or Planning Commission in San Luis Obispo County.

The Kern County and San Luis Obispo County General Plans are the only land use management plans relevant to the affected environment of the proposed South Star I and II Project sites. The applicable policies and implementation measures identified in these plans are included in Table 8.4-5.

The Kern County Land Division Ordinance and the San Luis Obispo County Real Property Division Ordinance, each adopted pursuant to the Subdivision Map Act, require the recording of every subdivision created through sale, lease, or financing of unincorporated county lands on a tract or parcel map (Kern County, 1999b and San Luis Obispo County, 1993). Tract maps, required for subdivisions consisting of five or more parcels, and parcel maps, required for subdivisions consisting of four or fewer parcels, represent discretionary approvals. The Kern County and San Luis Obispo County planning departments act as an advisory agency as it oversees the maps during the review process; final approval is granted by the planning commission, who records the final maps.

Federal and state regulations circumscribe and, in the case of South Star I and II, preempt local regulations for energy resources and development; however, each county retains authority over the location and conditions of energy development in its county. The county plans

and policies that specifically relate to the transmission line components of the proposed South Star I and II Project sites are described below.

Kern County maintains the following stated goal with respect to transmission lines: "To encourage the safe and orderly development of transmission lines to access Kern County's electrical resources along routes which minimize potential adverse environmental effects: (Kern County, 1984, p. 1-28). The county also maintains the following policies:

The County shall encourage the development and upgrading of transmission lines and associated facilities (e.g., substations) as needed to serve Kern County's residents and access the County's generating resources, insofar as transmission lines do not create significant environmental or public health and safety hazards (Policy No. 1).

- The County shall review proposed transmission lines and their alignments for conformity with the Land Use Element of the Kern County General Plan (Policy No. 2).
- In reviewing proposals for new transmission lines and/or capacity, the County shall assert a preference for upgrade of existing lines and use of existing corridors where feasible (Policy No. 3).
- The County shall work with other agencies in establishing routes for proposed transmission lines (Policy No. 4).
- The County shall discourage the siting of aboveground transmission lines in visually sensitive areas (Policy No. 5).
- The County shall encourage new transmission lines to be sited/configured to avoid or minimize collision and electrocution hazards to raptors (Policy No. 6).
- The County shall monitor the supply and demand of electrical transmission capacity locally and statewide (Implementation A).
- The County shall continue to maintain provisions in the Zoning Ordinance and update them as necessary to provide for transmission line development (Implementation B).

San Luis Obispo County maintains the following standards with respect to power transmission lines and related facilities:

 Proposals for new transmission lines shall be evaluated for alternatives that significantly reduce their visibility and impacts to sensitive environmental resources (Policy No. 49).

- As part of the siting analysis, proposals for new corridors should consider the following preferences to minimize impacts: ... projects that upgrade or modify existing lines ...[,] corridor consolidation with existing lines ...[, or as] the least preferred option ... entirely new corridors (Policy No. 50).
- The application for a proposed new or replacement electrical transmission line is to be accompanied by documentation that the applicant is the owner of record of the land involved; or has easements or lease arrangements from the owners of record sufficient to carry out the actions proposed; or has notified all landowners of record potentially involved within the corridor being proposed.
- Development Plan approval is required for electric power transmission lines, 69kV design capacity and greater, whether to be established or upgraded.
- (San Luis Obispo, 1980c [1999]; San Luis Obispo Land Use Ordinance, §22.08.286 ff.) Each County's plans and policies that relate to the proposed transmission route for South Star I and II are identified in Table 8.4-2.

8.4.2.2 State

The CEC has both policy development and permitting responsibilities for generating projects that have a capacity of over 50 megawatts (MW). Generating facilities such as the proposed South Star project requires CEC approval. As such, the CEC is also the lead agency in the implementation of the California Environmental Quality Act (CEQA) and must follow appropriate state law and guidelines in its review and decision making.

The Williamson Act is a state land use policy that serves to preserve open space and agricultural land. The act discourages premature urbanization and prevents landowners from being forced to develop their property because their property taxes are based on the greater value of the land as represented by commercial or residential use. The Williamson Act is implemented by creating a voluntary contract with property owners that restricts land use for 10 years, with an automatic annual renewal. In return for the agreement to restrict the use of land for 10 years, the landowner receives preferential property tax rates based on the current use of the land rather than its market value. The California Department of Conservation, Office of Land Conservation, administers lands under Williamson Act contracts.

Neither of the proposed facility sites, nor any of the transmission or pipeline routes will be located on land currently under Williamson Act contract.

8.4.2.3 Federal

Portions of the proposed transmission line route traverse BLM-managed lands within the Caliente Resource Management Area. This area was established to promote continued oil and gas production as well as the protection and recovery of threatened and endangered species. The Caliente Resource Management Plan (Caliente RMP) is the land use plan for all BLM-administered public lands and federal mineral estate lands within the Caliente Resource Area, which encompasses approximately 590,000 acres of public land and an additional 450,000 acres of federal-reserved mineral estate land. Areas of Critical Environmental Concern (ACEC) include public lands where special management attention and direction is necessary to protect and prevent irreparable damage to, among other things, important historic, cultural, and scenic values, fish or wildlife resources. The BLM implements management objectives to protect and enhance the resource values of ACECs. Neither of the South Star facilities, nor any of the associated transmission or pipeline routes are located in any ACEC. The closest ACEC is the Carrizo Plain ACEC, portions of which lies to the south and west of the proposed South Star I and II Project sites.

8.4.3 Description of South Star I and II and Its Components

8.4.3.1 Proposed South Star I and II Sites

The South Star I and II sites are proposed to be located in the southeast ¼ of Section 17 (South Star I) and the middle of Section 7 (South Star II), both of T32S, R23E, approximately one mile southwest of Midoil Road. The fenced plant area for each site will be approximately 5.8 acres. An additional 0.5 acre will be used for parking and access road. Each 5.8-acre proposed plant site is located on land to be leased from TCI. The leased parcel for South Star I (Section 17) will be part of an existing parcel shown as county assessor's parcel number (APN) 198-180-041. The lease parcel for South Star II (Section 7) will be part of an existing parcel shown as APN 198-130-003. Both parcels are located within unincorporated land in Kern County. Access to each site is from Midoil Road, then along unnamed, improved oilfield roads.

A detailed description of the proposed South Star I and II sites, the proposed transmission route, and the proposed natural gas, pipeline can be found in Sections 2.0 and 6.0.

Figures 8.4-1 and 8.4-3 illustrate the zoning districts and existing land uses, respectively, within a one-mile radius of the proposed South Star I and II sites. Existing and potentially sensitive land uses, general plan designations, and zoning are also summarized in Tables 8.4-3 and 8.4-4.

South Star I will interconnect to Morgan Substation by replacing poles supporting an existing 4.7 mile 12.47 kV transmission line. This transmission line will be removed and replaced with a conductor suitable for 115 kV service and extended approximately 0.6 miles to interconnect South Star I. Existing poles will be used where feasible. Alternatively, a new transmission line will be constructed parallel to the existing 12.47 kV transmission line.

The TCI South Midway Utility Corridor will extend from the TCI Station 109 Gas Dehydration Facility (Station 109) located in Section 9, T32S, R23E to serve current and planned oilfield production activities in Sections 7, 8, 9, 17, and 21 of T32S, R23E in the South Midway Oil Field. The South Midway Utility Corridor is composed of an approximately 11-foot wide aboveground steel piperack supporting utility pipelines. In addition, every 300-400 yards, there are "expansion loops" that are as wide as 40 feet. The utility corridor is approximately 50 feet wide, including access for operation and maintenance. The lines vary in size and capacity along the corridor.

A 16" diameter natural gas pipeline will be constructed to supply natural gas to the South Star Project sites. The new TCI natural gas line will tie into the existing lateral line from the Kern-Mojave Pipeline located in the northeast quarter section of Section 3, T32S, R23E. It will have sufficient capacity to serve South Star I and II and replace existing gas transmission capacity supporting TCI operations. This new TCI natural gas line will be buried underground and will extend from this tie in point to the TCI South Midway Utility Corridor at Station 109. The pipeline will then be placed on an aboveground pipe rack in TCI's South Midway Utility Corridor.

Land Acquisition. No land acquisition is necessary. Following CEC certification of South Star, the South Star Cogeneration Company, owner and operator of South Star I and II, will enter into contracts with TCI to deliver steam and wastewater to, and receive natural gas and boiler feedwater via the TCI South Midway Utility Corridor. Upon the execution of such contracts, South Star I and II will interconnect steam, wastewater, and boiler feedwater pipelines

at the fenceline to the TCI South Midway Utility Corridor piperack. South Star will also interconnect into the TCI 16-inch natural gas supply line with a 12-inch diameter gas line to supply gas compressors at South Star I. These compressors will be sized to provide 700 psig natural gas to both South Star sites. A 12-inch diameter gas line will also be installed to supply natural gas from South Star I to South Star II.

Although lands within one-quarter mile of the proposed transmission route and within one mile of South Star I and II are zoned Agricultural or Rural Lands (see Figures 8.4-1 and 8.4-3) and some lands are currently used for limited grazing (URS, 2001), South Star I and II will each only permanently impact a 6.3-acre for the proposed plant sites.

TCI owns or leases all properties which will be impacted by the South Star I and II Project sites, with the exception of BLM Sections 9, T32S, R23E, and 35 T31SR22E and the Sunset Railroad (Sections 9, T32S, R23E), owned by the City of Taft, which will be crossed by either the proposed or alternate natural gas pipeline near Station 109 Gas Dehydration Plant and Chevron Section 3 T32S, R23E. South Star will submit a right-of-way application to BLM and negotiate with the City of Taft Public Works Department to obtain an encroachment permit to allow for this crossing. In addition, existing agreements with Chevron allow this use with these exceptions, no additional easements, rights-of-way, or acquisitions are required (City of Taft, 2001). The landowners along the proposed transmission and natural gas corridor are listed in Table 8.4-6 and shown on Figure 8.4-4.

Existing and Proposed Land Uses. Figure 8.4-3 shows existing land uses within the proposed South Star I and II sites and in the surrounding one-mile area. The plant sites are located within or near the edge of existing oil field operations. This is the case for the entire study area, with the exception of most of the land in San Luis Obispo County which is undisturbed rural lands with limited grazing use. The proposed transmission line, or its alternative, will have minimal impact on such use. Non-oil field uses exist outside the study area, including residential and school use in Fellows (just outside the 1-mile radius of South Star I and the ¼-mile radius of Alternate Route 2 (Natural Gas), and minor commercial and residential use at the intersection of State Route 33 and Midway Road (approximately ¾ mile outside the study

area). With these exceptions, the remainder of the surrounding one-mile area is currently used for petroleum and energy-related purposes.

No portion of South Star I and II, including the proposed transmission routes, will be located on property currently under Williamson Act contract.

The California Department of Conservation, Division of Land Resources Protection, determines whether land is designated as prime farmlands or of unique or state-wide importance based on definitions developed for the California Farmland Mapping and Monitoring Program. The proposed South Star I and II plant sites are not designated as prime farmlands. The transmission line and the TCI South Midway Utility Corridor do not cross lands designated as prime farmland. Only the proposed and alternate natural gas pipeline (between TCI Station 109 Gas Dehydration Plant and Kern-Mojave pipeline connection) will cross lands designated prime farmland as defined by the California Department of Conservation (see Section 8.9), therefore, no acreage will be permanently removed from active agricultural use and impacts to grazing lands will be minimal.

According to the Kern County and San Luis Obispo Planning Departments, no proposed industrial developments are planned within a two-mile radius of the plant sites (Kern County Planning Department, 2001; San Luis Obispo County Planning Department, 2001).

No projects in the Shandon-Carrizo plan area are currently under review (San Luis Obispo County, 2001). No projects within the vicinity of South Star (an area consisting of the land sections in which any portion of South Star is located) are currently under review in western Kern County.

Agency Approvals. Evaluation and approval of the CEC Application for Certification (AFC) represents the only discretionary approval required for South Star. Other land-related approvals include:

- BLM ROW Grant
- CDFG Streambed Alteration Agreement (1600; 1603) & 2081 Incidental Take Permit

Potentially Sensitive Land Uses. There are no parks, recreational areas, educational facilities, religious sites, agricultural areas, health care facilities, or commercial uses on the South Star I and II sites or within a one-mile radius of South Star I and II (see Section 8.1Air Quality and Section 8.5 Noise for additional information regarding sensitive land uses).

Zoning. As shown on Figure 8.4-1, the zoning designations within a mile-radius of the proposed South Star I and II sites include Limited Agriculture (Kern County), Natural Resource (20) with and without Flood Plain Combining and with and without Geologic Hazard Combining (Kern County) and Rural Lands with and without Flood Hazard Combining and with and without Sensitive Resource Combining (San Luis Obispo County) (see Table 8.4-5). Pursuant to Kern County Ordinance No. 269.53, electrical power generating facilities are a conditionally permitted use under the Kern County Zoning Ordinance for areas zoned Limited Agricultural. Resource extraction and energy development uses are permitted by right in areas zoned Limited Agriculture and include "cogeneration facility or steam generators, primarily intended for steam production used for production of oil or gas, excluding coal fired" (Kern County Planning Department, 1999b); a conditional use permit is therefore not required for such uses. According to the Kern County Planning Department, as a matter of policy, all cogeneration facilities are included under the above definition. Although conditional use permits are required for private electrical power generating plants, conditional use permits are not required for cogeneration facilities (Kern County Planning Department, 1999a). Thus, the proposed project is an allowable use as a matter of right; no conditional use permit would be required absent the CEC's jurisdiction.

Land Ownership Patterns. Both public and private land ownership is found within one mile of the proposed South Star sites and in the surrounding study area, as shown on Figure 8.4-4. The public lands are held by Bureau of Land Management (BLM). Appendix E lists the surrounding property owners within 1,000 feet of the proposed South Star I and II Project sites and within 500 feet of the proposed linear facilities.

Land Use Goals, Policies, and Implementation. Land use goals and policies pertaining to Kern County and San Luis Obispo County energy development and transmission lines are expressed in the Kern County Zoning Ordinance and the San Luis Obispo County Land

Use Ordinance, each of which governs review of utility towers under the jurisdiction of the Public Utilities Commission. In San Luis Obispo County, routes for overhead transmission lines must be submitted to the zoning administrator for nonbinding review and recommendations as to the route, placement, and height of the towers, and the effect on land use (San Luis Obispo County Planning Department, 2001). Kern County defers to the requirements and jurisdiction of the California Public Utilities Commission (Kern County, 1999b. §19.08.090).

8.4.3.2 Proposed Transmission Route

South Star I (Mile Post [MP] 0.0) will interconnect to Morgan Substation by an existing 4.7 mile 12.47 kV transmission line. This transmission line will extend northwest approximately 0.6 miles to interconnect to South Star I. South Star II proposes to add a second 115KV circuit to the proposed South Star I transmission line. This second circuit will be approximately 3.8 miles to interconnect South Star II to the Morgan Substation (see Figure 8.4-2).

Figures 8.4-1 and 8.4-3 illustrate the zoning and existing land uses, respectively, along the proposed transmission line route. Existing and potentially sensitive land uses, general plan land uses, and zoning within the transmission line corridor are identified by MP as summarized in Tables 8.4-3, 8.4-4, 8.4-5, and 8.4-7.

Existing and Proposed Land Uses. The existing transmission line (which will be reconductored) crosses approximately 2.3 miles of undeveloped lands owned by TCI and 3.0 miles of developed oilfield land owned by TCI or BLM as shown on Figure 8.4-3.

The proposed South Star I plant site is located approximately 2.5 miles southeast of Fellows, and 2.5 miles west of Taft. The South Star II Project site is located approximately 1.5 miles south of Fellows and 4 miles west of Taft. Both sites are within unincorporated portions of Kern County and San Luis Obispo County. No residences are located within a quarter mile of the proposed transmission route (URS, 2001), and no residential developments are currently proposed in the study area along the route (Kern County Planning Department, 2001; San Luis Obispo County Planning Department, 2001).

The proposed transmission line route does not cross any transportation route other than unnamed, improved oil field roads.

Agency Approvals. With the exception of the San Luis Obispo County zoning administrator's nonbinding review of proposed overhead electric transmission line routes under the jurisdiction of the Public Utilities Commission, no discretionary approvals from Kern County or San Luis Obispo County are required.

Potentially Sensitive Land Uses. No potentially sensitive land uses occur within a quarter-mile of the proposed transmission line route. The nearest residences to the transmission line, homes on the southern fringe of Fellows, are located approximately 1.0 mile northeast of the proposed transmission line route.

Zoning. The zoning designations within a half-mile of the proposed transmission line route include Exclusive Agricultural ("A") and Limited Agricultural ("A-1) (Kern County), and Rural Lands, some with Flood Hazard Combining ("RH" and "RH FH") (San Luis Obispo County). Figure 8.4-1 illustrates the zoning districts along the route. These districts are also described in Table 8.4-5.

There have been no discretionary project reviews by either Kern County or San Luis Obispo County within the 18 months prior to the applicant's AFC in the vicinity of the proposed South Star I and II Project sites. There have been no recent changes to the zoning designations in the vicinity, nor are such changes expected (Kern County, 2001; San Luis Obispo County, 2001).

8.4.3.3 Proposed and Alternate Natural Gas Pipeline Route

The proposed natural gas pipeline will run from the Kern-Mojave Pipeline in the northeast ¼ section of Section 3, T32S, R23E approximately 2.3 miles to the TCI South Midway Utility Corridor at Station 109. The alternate natural gas pipeline will have the same start and end points, the Kern-Mojave Pipeline and Station 109, but extends approximately 2.4 miles. Both routes lie entirely within unincorporated Kern County (see Figure 8.4-2).

Land Acquisition. BLM owns a quarter section of land along the proposed natural gas pipeline route. Accordingly, a right-of-way or easement will be required. Chevron owns a

full section of land which will be crossed by either the proposed or alternate natural gas pipeline. Existing agreements will allow construction of either alternative. The City of Taft owns the Sunset Railroad right-of-way which will be crossed by either the proposed or alternate natural gas pipeline. TCI plans to obtain an encroachment permit from the City of Taft which will allow the pipeline to cross beneath the right-of-way.

Agency Approvals. Approvals are required for the lands owned by BLM. An encroachment permit will need to be negotiated with the City of Taft for the crossing under the Sunset Railroad right-of-way. No other agency approvals are required as the lands are owned in fee or subject to existing agreements between the landowner and TCI.

Potentially Sensitive Land Uses. No potentially sensitive land uses occur within a quarter-mile of the proposed or alternate natural gas pipeline route. The nearest residences to the natural gas pipeline routes are located in Fellows as described in Section 8.4.3.2, above.

Zoning. The zoning designations within a half-mile of the proposed and alternate natural gas pipeline routes include Limited Agricultural and Exclusive Agricultural (Kern County). Figure 8.4-1 illustrates the zoning districts along the route. These districts are also described in Table 8.4-5.

8.4.3.4 Natural Gas Pipeline Route TCI South Midway Utility Corridor

The proposed natural gas pipeline route, will extend from TCI Station 109 located in Section 9, T32S, R23E MDB&M southwesterly 1½ miles to a location between South Star I and the South Midway Steam Plant. From this point the pipeline will continue to run southeast to South Star I and northwest to South Star II on the above-ground TCI South Midway Utility corridor piperack.

The proposed natural gas pipeline route lies entirely within unincorporated Kern County (see Figure 8.4-2).

Agency Approvals. No agency approvals are required as the lands are owned in fee by TCI.

Potentially Sensitive Land Uses. No potentially sensitive land uses occur within a quarter-mile of the proposed natural gas pipeline route. The nearest residences to the natural gas pipeline route are located in Fellows as described in Section 8.4.3.2, above.

Zoning. The zoning designations within a half-mile of the proposed natural gas pipeline route include Limited Agricultural (Kern County) and Natural Resource (20). Figure 8.4-1 illustrates the zoning districts along the route. These districts are also described in Table 8.4-5.

8.4.3.5 Alternate Route 2 (Natural Gas)

Alternate Route 2 for South Star II would originate at the South Star II plant site, site and extend northwest approximately 1.5 miles to the terminus of the existing TCI utility corridor. Alternate Route 2 lies entirely within unincorporated Kern County (see Figure 8.4-2).

Agency Approvals. No agency approvals are required as the lands are owned in fee by TCI.

Potentially Sensitive Land Uses. No potentially sensitive land uses occur within a quarter-mile of Alternate Route 2. The nearest residences are located in Fellows as described in Section 8.4.3.2, above.

Zoning. The zoning designations within a half-mile of Alternate Route 2 include Limited Agricultural (Kern County) and Rural Lands Flood Hazard Combining (San Luis Obispo County). Figure 8.4-1 illustrates the zoning districts along the route. These districts are also described in Table 8.4-5.

8.4.4 Environmental Consequences

This section discusses the environmental consequences of South Star I and II within one mile of the proposed site and within one-quarter mile of the proposed transmission and pipeline routes. The potential environmental consequences concern both the construction and the operation of the cogeneration plants, the transmission line, the natural gas pipelines.

8.4.4.1 Significance Criteria

To determine the significance criteria appropriate to this study, the CEC Guidelines (CEC, 1997) and CEQA Guidelines (14 California Code of Regulations [CCR] 15,000 et seq. [1999]) were consulted.

The following criteria were used to determine whether significant project-related impacts might occur as a result of South Star I and II:

- Conflict with the adopted environmental plans and goals of the community where a project is located; displacement of a large number of people or the inducement of substantial population growth; disruption or division of an established community; the conversion or impairment of prime agricultural land; or conflict with established recreational, educational, religious, or scientific uses of the area (Appendix G of the State CEQA Guidelines);
- Noise and odor nuisances that will cause existing land uses to cease or be adversely affected, or inhibit the development of future land uses;
- Traffic problems that will restrict access, adversely affecting land uses, such as residential or commercial; or
- Visual impacts that will impact land uses, such as recreation.

8.4.4.2 Proposed South Star I and II

Construction-Related Impacts. Construction activities will take place in such a way as to minimize interference with existing grazing and energy-related uses. Each proposed site for South Star I and II is a 6.3-acre site within land owned by TCI. Construction activities could potentially impact local roadways, by adding additional traffic along access routes to existing industrial operations within the area. These potential impacts are discussed in Section 8.10 (Traffic and Transportation). Construction activities would also increase the amount of noise, dust, and emissions in the area. These issues are discussed in detail in Sections 8.5 (Noise) and 8.1 (Air Quality).

Material and equipment staging areas will be required during the construction period; these areas will serve as base stations for employees, field office locations, laydown areas, and places to store materials, equipment, and vehicles. The proposed staging areas will be located

adjacent to each proposed South Star site, on developed lands with no known environmentally sensitive areas.

Residences located in the vicinity of the proposed South Star I and II sites may experience short-term impacts associated with facility construction, including visual disruption, increased noise and dust, and increased traffic and vehicle emissions due to project equipment and vehicles using surrounding roadways (see Sections 8.1, 8.5, 8.10, and 8.11). However, as noted above, the nearest residences are approximately 2.5 miles to the northeast and 1.3 miles to the north from South Star I and II, respectively.

Overall, the land use impacts associated with the construction activities will be insignificant because the activities are compatible with existing land uses, expand the use of an existing energy-related area, and are temporary (approximately 15 months).

Operations-Related Impacts. The proposed South Star I and II sites are located within or on the edge of an existing oilfield. South Star I and II will be designed for an operating life of 20 years and represent further development of an area committed to petroleum- and energy-related uses rather than the introduction of industry to a non-industrial area. The proposed use of the sites is compatible with adjacent uses, as evidenced by its inclusion within the range of conditionally permitted uses by the Kern County Zoning Ordinance. The operations of the proposed plants are not expected to result in significant adverse impacts to surrounding land uses.

Compatibility with Existing and Proposed Land Uses. The Kern County General Plan indicates that agricultural and mineral and petroleum resource areas are compatible adjacent land uses to cogeneration (power) plants (Kern County General Plan, 1982 [1994]). The proposed South Star I and II Project sites involve the creation of a cogeneration (steam provided for enhanced oil recovery operations) use in an area already committed to petroleum and energy-related uses. South Star I and II would not result in a change of land use, nor would it change the existing character of the area, and would be consistent with the existing uses in the vicinity of the project sites.

The operation of South Star I and II is expected to result in no inflow of workers to the surrounding area of Kern County (see Section 8.10). The impact of the proposed South Star I and II Project sites on recreational facilities would be insignificant and would not result in any increased demand on area facilities or services.

Consistency with Existing Land Use Plans, Policies, and Regulations. The current Kern County zoning designation at the proposed South Star I and II sites is Limited Agricultural. Electrical power generating facilities are a conditionally permitted use under the Kern County Zoning Ordinance for areas zoned Limited Agricultural. According to the Kern County Planning Department, as a matter of policy, all cogeneration facilities are an allowable use as a matter of right; no conditional use permit would be required absent the CEC's jurisdiction. Therefore, the proposed South Star I and II Project sites would be consistent with the existing uses in the vicinity of the sites.

8.4.4.3 Proposed Transmission Route, Proposed Natural Gas Pipeline Route, and Alternate Route 1 (Natural Gas)

Construction-Related Impacts. The construction activities associated with the development of the proposed transmission line and the proposed pipeline route(s) are expected to occur over a 15-month period. Construction activities will be undertaken in a way that minimizes interference with existing land uses in the proposed transmission line and pipeline route corridors.

The assessment of construction impacts resulting from the installation of the replacement poles along the proposed transmission route encompasses consideration of the type of structures, access to the structures, and temporary construction area requirements. For information on the design and description of these structures, refer to Section 6.0. Overall, construction of the transmission line system will temporarily disturb approximately 25.8 acres and permanently disturb approximately 0.3 acres. The safety measures listed in Section 8.7 (Worker Health and Safety) will be incorporated into the South Star I and II Project design to reduce any safety impacts that might occur during the construction of the transmission lines and associated structures.

Most transmission poles will be located near or along existing roads. A suitable marking system will be developed to ensure that designated access routes are consistently used and that equipment and construction personnel do not randomly travel to structure locations.

Approximately 3,750 ft² of soil will be temporarily disturbed at the location of each transmission line support structure during construction. Approximately 10 square feet of soil will be disturbed, covered, and permanently removed from agricultural use at the location of each transmission line support structure. For the new proposed 0.6 mile extension of the existing line to South Star I, approximately 16 wood poles with single 36-inch diameter support footings are planned (one every 200 feet). Construction of all of the structures would temporarily disturb approximately 1.4 acres and cover approximately 0.01 acres of soil.

The existing 4.7-mile 12.47 kV transmission line has 140 wood poles. Although South Star would use the existing poles where feasible, soil disturbance has been calculated as a "worst-case" scenario assuming replacement of all 140 poles. Replacement construction would temporarily disturb approximately 3,750 square feet of soil at each pole location, resulting in a temporary disturbance of approximately 12.1 acres of soil. Since the existing pole locations will be reused, no permanent covering or removal from agricultural use of soil will occur. The alternate new 115 kV Transmission Line would have approximately 156 poles (including the line for South Star I), resulting in approximately 13.5 acres of soil disturbed during construction, and a total of 0.03 acres of soil covered and removed from agricultural use.

In order to either replace existing poles or install new transmission poles, approximately 1 mile of new road and regrading of approximately 2 miles of existing road will need to be constructed. Regrading work will result in a temporary soil disturbance of 1.9 acres for existing roads and approximately 1.2 acres for new roads.

Residential Areas. Although extremely limited, even in the neighboring vicinity outside the study area, residential land uses may experience short-term impacts associated with facility construction, including an increase in traffic and vehicular emissions because project equipment and vehicles will use surrounding roadways. However, these potential impacts are anticipated to be short-term in nature, occurring only during project construction, and will not result in any significant long-term impacts (see Sections 8.5, 8.10, and 8.11).

Sensitive Land Uses. There are no schools, hospitals, parks, or other sensitive land uses located within the one-half mile corridor study area identified for the proposed transmission and natural gas pipeline routes.

Operations-Related Impacts. Once the transmission poles have been installed, the affected land will be restored to its original condition wherever possible. Operational impacts will be limited to the total area permanently affected by the structures (i.e., the nonusable land following construction [about 10 square feet per pole]). The structures will be located in a way that reduces conflicts with existing and future land uses, which as stated above, are restricted to limited grazing and petroleum and energy-related operations.

Once the pipelines have been installed, the affected land will be restored to its original condition wherever possible. Operational impacts will be limited to the total area permanently affected by the aboveground piperacks. The structures will be located in a way that reduces conflicts with existing and future land uses, which as stated above, are restricted to limited grazing and petroleum and energy-related operations.

For the most part, access routes will be along existing roadways, however in two locations existing roads will be re-graded to create access routes for operation and maintenance.

The potential environmental impacts resulting from the construction and/or operation of the proposed transmission line and the proposed shared and natural gas pipelines include potential incompatibility with existing and proposed land uses within the transmission line and gas pipeline corridors (e.g., changes in land use, conflicts with existing uses, and effects on potentially sensitive land uses) and nonconformity with existing land use plans, policies, and regulations. These issues are addressed separately below.

Compatibility with Existing and Proposed Land Uses. Existing land uses along the proposed transmission and natural gas pipeline routes consist of limited grazing of undeveloped lands and existing oil and gas production fields.

Undeveloped Land. The proposed transmission route traverses approximately 4.4 miles of areas used for limited grazing, principally within San Luis Obispo County. The San Luis Obispo County General Plan and Land Use Ordinance plan designation provides for thermal

power generation as a conditionally permitted use. The remainder of the proposed transmission route located in Kern County is designated Exclusive Agriculture or Limited Agriculture. These general plan designations provide for public utility uses as a "compatible use." Because the zoning descriptions throughout the area of the proposed transmission and pipeline routes identify utility facilities as compatible uses, no substantial conflict exists between the compatibility of the new and existing land uses.

Energy-Related Development Areas. Power transmission facilities are designated as energy-related development by the Energy Elements of the Kern Country General Plan and the San Luis Obispo County General Plan. Power transmission facilities are also deemed as compatible uses with irrigated cropland, water storage or groundwater facilities, live stock grazing, and dry land farming (Kern County, 1984; San Luis Obispo County, 1980b [1999]). Because oil wells, pipelines and transmission lines are typical land uses along the transmission line and proposed pipeline routes, the transmission line and pipelines are compatible with existing and planned land uses in this area (see Table 8.4-1 and 8.4-3).

Residential Areas/Schools. There are no residences or schools within the study area. No residential developments have been proposed in the study area along the proposed transmission or pipeline routes. Therefore, no adverse impacts to residences and schools are anticipated from the operation of the proposed South Star linear facilities.

Agricultural Lands. Although no cultivated land was observed within the affected environment during the site visit (URS, 2001), future agricultural operations remain a possibility. The construction of South Star I and II could result in the loss or temporary delay of potential crop production along the transmission route; any disturbed area along the proposed transmission route would be returned to agricultural use after construction is complete. While no agricultural lands within the study area are covered by Williamson Act contracts, the only area to be permanently affected would be the locations where existing transmission poles are located, totaling approximately 0.3 acres. Only the transmission line itself is proposed to cross lands with a beneficial use (limited grazing); the area of permanent disturbance of the transmission line is considered a minimal disturbance. Therefore, these impacts will not affect existing land use practices and policies on neighboring properties.

Compatibility with Existing Land Use Plans, Policies, and Regulations. The proposed transmission line and natural gas pipeline routes traverse land under BLM jurisdiction. These lands are within the Valley Management Area of the Caliente Resource Management Area. The area is managed by the BLM for continued oil and gas production, as well as for the protection and recovery of threatened and endangered species (BLM, 1996). The use of these lands for transmission line or pipeline routes is not expected to either significantly constrain resources within or remove resources from the affected areas (refer to Figure 8.4-1 for identification of BLM lands along the route). Nevertheless, the siting of transmission facilities in these areas must be authorized by right-of-way following evaluation by the BLM. The siting of transmission facilities is also subject to the Federal Land Planning Management Act (FLPMA) and NEPA environmental compliance. Impacts to existing biological resources in these areas are further discussed in Section 8.2, Biological Resources.

8.4.4.4 Alternate Route 2 (Natural Gas)

Construction-Related Impacts. The construction activities associated with the development of the Alternate Route 2 are expected to occur over a 15-month period. Construction activities will be undertaken in a way that minimizes interference with existing land uses in the alternate pipeline route corridor. The land use impacts associated with construction activities will be insignificant because the activities are compatible with existing land uses, expand the use of an existing energy-related area and are temporary.

Residential Areas. Although extremely limited, residential land uses may experience short-term impacts associated with facility construction, including an increase in traffic and vehicular emissions because project equipment and vehicles will use surrounding roadways. However, these potential impacts are anticipated to be short-term in nature, occurring only during project construction, and will not result in any significant long-term impacts (see Sections 8.5, 8.10, and 8.11).

Sensitive Land Uses. There are no schools, hospitals, parks, or other sensitive land uses located within the one-half mile corridor study area identified for Alternate Route 2.

Operations-Related Impacts. Once the pipeline has been installed, the affected land will be restored to its original condition wherever possible. Operational impacts will be limited as the pipeline will be below grade with little conflict with existing and future land uses, which as stated above, are restricted to petroleum and energy-related operations.

Access routes will be along existing roadways, therefore no additional maintenance of access routes will be required for operation and maintenance of Alternate Route 2.

The potential environmental impacts resulting from the construction and/or operation of Alternate Route 2 include potential incompatibility with existing and proposed land uses within the pipeline corridor (e.g., changes in land use, conflicts with existing uses, and effects on potentially sensitive land uses) and nonconformity with existing land use plans, policies, and regulations. These issues are addressed separately below.

Compatibility with Existing and Proposed Land Uses. Existing land uses along Alternate Route 2 consist entirely of existing oil and gas production fields.

Energy-Related Development Areas. Power transmission facilities are designated as energy-related development by the Energy Elements of the Kern Country General Plan and the San Luis Obispo County General Plan (Kern County, 1984; San Luis Obispo County, 1980b [1999]). Because oil wells, pipelines and transmission lines are typical land uses along the alternate pipeline route, the pipeline is compatible with existing and planned land uses in this area (see Table 8.4-1 and 8.4-3).

Residential Areas/Schools. There are no residences or schools within the study area. No residential developments have been proposed in the study area along the alternate pipeline route. Therefore, no adverse impacts to residences and schools are anticipated from the operation of the alternate pipeline.

Agricultural Lands. No agricultural land will be disturbed by Alternate Route 2. As described in detail above, areas of permanent disturbance are located within the existing oilfield. Therefore, these impacts will not affect existing land use practices and policies on neighboring properties.

Compatibility with Existing Land Use Plans, Policies, and Regulations. The current Kern County zoning designation at the alternate pipeline is Limited Agricultural. Electrical power generating facilities are a conditionally permitted use under the Kern County Zoning Ordinance for areas zoned Limited Agricultural. According to the Kern County Planning Department, as a matter of policy, all cogeneration facilities are an allowable use as a matter of right; no conditional use permit would be required absent the CEC's jurisdiction. Therefore, the proposed South Star I and II Project sites would be consistent with the existing uses in the vicinity of the sites. The alternate pipeline route does not traverse land under BLM jurisdiction.

8.4.5 Potential Cumulative Impacts

South Star I and II will further develop oil and gas production site without converting agricultural land or otherwise changing the industrial character of the site. Conversion of agricultural lands to non-agricultural use will be minimal. The area affected by the South Star I and II Project sites does not contain areas actively under agricultural production. Numerous other oil production activities take place in the vicinity of South Star I and II. Collectively, these activities indicate a trend toward energy-related uses on agricultural land in this part of Kern County. Increased energy-related production in the vicinity of South Star I and II may reduce the possibility of lands not under agricultural production becoming actively used for agriculture.

However, the Kern County General Plan encourages energy production as a compatible use in agricultural zones. The County also acknowledges the importance of energy production to the County and encourages orderly, planned development of energy resources (Kern County, 1984). Development of energy resources in agricultural areas is consistent with Kern County's economic goals and will have a positive impact on Kern County's economy. The cogeneration plants will be built on portions of larger parcels owned by TCI that are presently disturbed though not used for oil production. The plants will not change the existing land use in the vicinity, which is industrial in nature, nor will it expand the area currently used for oil production. Thus, the plant will have only a minimal impact on land use at the cogeneration sites.

The proposed transmission line will utilize an existing transmission corridor. While the South Star I and II transmission line(s) may increase the impact of the industrial activity in the transmission corridor, it will also limit the overall impact by reducing the amount of agricultural land that would otherwise be converted for transmission line use. The transmission corridor will upgrade or parallel approximately 4.7 miles of existing transmission line and add 0.6 miles of new transmission line (see Figure 8.4-1), and thus will minimally convert additional agricultural land into urban uses. Undisturbed land located within the remainder of the right of way may be developed, contributing incrementally to a loss of undeveloped lands in Kern County and San Luis Obispo County. However, consolidation of above-ground transmission lines in established transmission corridors minimizes the overall land use impact and is consistent with the respective Kern County and San Luis Obispo County General Plan Energy Elements (Kern County, 1984; San Luis Obispo County, 1980b [1999]).

Other energy-related projects planned or proposed in the vicinity of South Star I and II would not affect the same lands as South Star I and II. As a result, no cumulative land use impacts are expected.

8.4.6 Unavoidable Adverse Impacts

No significant unavoidable adverse impacts will occur to land uses due to the construction or operation of South Star I and II and their associated transmission line and pipeline routes.

8.4.7 Agency Contacts

Agency	Contact/Title	Telephone
County of Kern Planning Department	Ted James, AICP Director	(661) 862-8600
2700 M Street, Suite 100 Bakersfield, California 93301-2323		
County of San Luis Obispo Department of Planning & Building County Government Center San Luis Obispo, CA 93408	Victor Holanda Director	(805) 781-5708
Bureau of Land Management Bakersfield Field Office 3801 Pegasus Drive Bakersfield, CA 93308	Steve Larson Resource Staff Chief	(661) 391-6099

Agency	Contact/Title	Telephone
City of Taft	Isaac George	(661) 763-1222
Department of Planning	Asst. Planner	
209 East Kern Street		
Taft, CA 93268		

8.4.8 LORS Compliance

This section provides a summary of the laws, ordinances, regulations, and standards (LORS) that may be applicable to South Star I and II. The LORS are organized into federal, state, and local standards, if applicable. Table 8.4-8 provides a summary of the LORS and includes the corresponding AFC section where compliance with each of the LORS is discussed.

The proposed South Star I and II project is located entirely within unincorporated areas of Kern County and San Luis Obispo County. The Kern County and San Luis Obispo County General Plans identifies goals and policies regarding energy and industrial development. The proposed South Star I and II Project sites will conform to these goals and policies.

The proposed transmission and pipeline routes will traverse lands under the jurisdiction of Kern County and San Luis Obispo County. The proposed transmission line and its associated structures will be constructed in compliance with the regulations and standards of the affected jurisdictions, as appropriate. These facilities will conform to the goals, policies, and implementation measures of the Kern County and San Luis Obispo County General Plans, as discussed in this section.

8.4.9 References

- CEC (California Energy Commission), 1997. Siting Regulations: Rules of Practice and Procedure and Power Plant Site Certification Regulations.
- City of Taft Planning Department, 2001. Telephone communication between Isaac George, Planning Department, and J. Adams, URS Corporation.
- Kern County Assessor's Office, 2001. Telephone communications between various staff members, Kern County Assessor's Office, and J. Adams, URS Corporation.
- Kern County, 1982. Kern County General Plan: The Land Use, Open Space, and Conservation Elements. Updated March 1994.

- Kern County, 1984. Kern County General Plan: The Energy Element. Updated March 1994.
- Kern County, 1999a. Telephone communication between David Rickels, Kern County Planning Department, and J. Smith, Radian (now URS Corporation).
- Kern County, 1999b. Kern County Zoning Ordinance, Title 19 of the Kern County Ordinance Code.
- Kern County, 2001a. Kern County Assessor's Map.
- Kern County, 2001b. Telephone communications between Holly Nelson, Kern County Planning Department, and J. Adams, URS Corporation.
- San Luis Obispo County Assessor's Office, 2001. Telephone communications between several staff members, San Luis Obispo County Assessor's Office, and J. Adams, URS Corporation.
- San Luis Obispo County, 1980a. San Luis Obispo County General Plan—Land Use Element, Circulation Element—Shandon-Carrizo Area Plan. Updated November 1996
- San Luis Obispo County, 1980b. San Luis Obispo County General Plan—Energy Element. Updated April 1999.
- San Luis Obispo County, 1980c. San Luis Obispo County General Plan, Inland Area—Land Use Element, Circulation Element—Framework for Planning. Updated November 1999
- San Luis Obispo County, 1980d. San Luis Obispo County General Plan: Land Use Ordinance—Title 22 of the San Luis Obispo County Code. Updated September 2000.
- San Luis Obispo County, 1993. San Luis Obispo County General Plan: Real Property Division Ordinance—Title 21 of the San Luis Obispo County Code.
- San Luis Obispo County, 2001. Telephone communications between John Busselle, San Luis Obispo County Planning Department, and J. Adams, URS Corporation.
- URS, 2001. Field reconnaissances performed by Sally Morgan and Catherine Pruett, URS Corporation.
- US Department of the Interior, Bureau of Land Management (BLM), 1996. Caliente RMP, Final Environmental Impact Statement.

Project Component	Existing Land Uses (General Type) ¹
South Star I Project Site	TCI lands, edge of oil field development
South Star II Project Site	TCI lands, edge of oil field development
Proposed Transmission Route	TCI and BLM lands, oil field development, undeveloped lands with limited grazing, existing transmission line
Natural Gas Pipeline Route (TCI South Midway Utility Corridor, Segment A)	TCI lands, oil field development
Natural Gas Pipeline Route (TCI South Midway Utility corridor, Segment B)	TCI, Chevron and BLM lands, oil field development
Alternate Route 1 (Natural Gas)	TCI and Chevron lands, oil field development
Alternate Route 2 (Natural Gas)	TCI lands, oil field development

¹ Existing land uses correspond to an inventory of land uses within a half mile corridor centered on the transmission line and natural gas pipeline (one-quarter mile to either side) and within one mile of the proposed South Star sites.

Table 8.4-2. Land Use Plans and Policies Related to the South Star I & II Project Sites

Authority Category

Policy

Kern County General Plan: Land Use, Open Space, and Conservation Elements

Nonjurisdictional Land

Coordination and cooperation will be promoted among the County, the incorporated cities, and the various special districts where their planning decisions and actions affect more than a single jurisdiction (Policy No. 1).

Land under state and federal jurisdiction will be considered as land designated for "Resource Management (see Chapter 8) on the General Plan map (Policy No. 4).

Physical Constraints

Kern County will not permit new developments to be sited on land, which is environmentally unsound to support such development (Policy No. 1).

Development will not be allowed in natural hazard areas pending the adoption of ordinances, which establish conditions, criteria and standards in order to minimize risk to life and property posed by those risks (Policy No. 2).

Zoning and other land use controls will be used to regulate and, in some instances, to prohibit development in hazardous areas (Policy No. 3).

New development will not be permitted in areas of landslide or slope instability as designated in the Safety and Seismic Safety Element of the General Plan, and as mapped on the Kern County Seismic Hazard Atlas (Policy No. 6).

Regardless of percentage of slope, development on hillsides will be sited in the least obtrusive fashion, thereby minimizing the extent of topographic alteration required (Policy No. 9).

Development proposed in areas with steep slopes will be reviewed for conformity to the adopted Hillside Development Ordinance to ensure that appropriate stability, drainage, and sewage treatment will result (Policy No. 10).

Designated flood channels and watercourses, such as creeks, gullies, and riverbeds will be preserved as resource management areas or, in the case of the urban areas, as linear parks (Policy No. 12).

New development will be required to demonstrate the availability of adequate fire protection and suppression facilities (Policy No. 13).

Kern County will evaluate the potential noise impacts of any development-siting action or of any applications it acts upon that could significantly alter noise levels in the community and will require mitigation measures where significant adverse effects are identified (Policy No. 14).

The air quality effects of a proposed land use will be considered when evaluating development proposals (Physical Constraints - Policy No. 15, p. 2-3).

Kern County will disapprove projects found to have significant adverse effects on Kern County's air quality, unless the Board of Supervisors, Board of Zoning Adjustment, or the Director of Planning and Development Services, acting as Hearing Officer or Parcel Map Advisory Agency, makes findings under CEQA (Policy No. 16).

Table 8.4-2. (Continued)

Authority Category

Policy

Public Facilities

Kern County General Plan: Land Use, Open Space, and Conservation Elements

In evaluating a development application, Kern County will consider impacts on the local school district(s) (Policy No. 8).

A large part of the short-term threat to public health and local government resources is due to transportation of hazardous waste (as well as hazardous material in general). Disposal capacity will be permitted for waste streams, which minimize the volume and distance of transportation (Policy No. 13).

All generators and processors of hazardous waste are encouraged to develop long-term waste management programs. Large generators of hazardous waste should be encouraged to recycle, treat, and detoxify their wastes on site. Many such processes could be implemented in existing industrial map designations, if zoned appropriately (Policy No. 17).

Determine the local cost of facility and infrastructure improvements and expansion which are necessitated by new development of any type and prepare a schedule of charges to be levied on the developer at the time of approval of the Final Map (Implementation E).

Ensure that the Superintendent of Schools and the respective school boards are informed of development proposals and are afforded the opportunity of evaluating their potential effect on the physical capacity of school facilities and their fiscal impact on locally originating revenue requirements. Their reports on these impacts should be available on a timely fashion prior to final consideration and action by Kern County on a development application (Implementation J).

Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31030 et seq. Permit applications shall identify the commercial shipping routes they propose to utilize for particular waste streams (Implementation 0).

Areas identified by the Soil Conservation Service as having high range-site value will be reserved for extensive agricultural use or as resource reserves if located within a County water district (Policy No. 2).

Appropriate resource uses of all types will be encouraged as desirable and consistent interim use in undeveloped portions of the County regardless of General Plan designation (Policy No 3).

In areas with a Resource designation on the General Plan map, only industrial activities, which directly and obviously relate to the exploration, production, and transportation of the particular resource will be considered to be consistent with this plan (Policy No. 4).

Development will be constrained, pending adoption of ordinances, which establish conditions, criteria, and standards, in areas containing valuable resources in order to protect the access to and economic use of these resources (Policy No. 9).

Agriculture and other resource uses will be considered a compatible use in areas designated for Mineral and Petroleum Resource uses on the General Plan until such time as the oil activities become too intensive to enable other resource uses to continue (Policy No 10).

Resource

Table 8.4-2. (Continued)

Authority Category

Policy

Kern County General Plan: Land Use, Open Space, and Conservation Elements

Resource

Rivers and streams in the County are important visual and recreational resources and (Continued) wildlife habitats. Areas of riparian vegetation along rivers and streams will therefore be preserved when feasible to do so (Policy No. 11).

> The County will maintain and enhance air quality for the health and well being of County residents by encouraging land uses, which promote air quality and good visibility. (Policy No. 13).

Habitats of threatened or endangered species should be protected to the greatest extent possible (Policy No. 14).

Areas designated as Resource Reserve, Extensive Agriculture, and Resource Management which are presently under Williamson Act Contracts will have a minimum parcel size of 80 acres until such time as a contract expires or is canceled, at which time the minimum parcel size will become 20 acres (Policy No. 15).

The County will encourage development of alternative energy sources by tailoring its Zoning and Subdivision ordinances and building standards to reflect Alternative Energy Guidelines published by the California State Energy Commission (Policy No. 17).

Encourage owners of agricultural land to enter into Land Conservation Act contracts with the County to ensure that the property remains in long-term agricultural use (Implementation C).

General Provisions

Prior to issuance of any development or use permit, the County shall make the finding, based on information provided by California Environmental Quality Act (CEOA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development. The developer shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed South Star I and II Project (Policy No. 3).

The air quality implications of new development will be considered in approval of major developments or area wide land use designations (Policy No. 15).

The County will promote the preservation of designated historic buildings and the protection of cultural resources, which provide ties with the past and constitute a heritage value to residents and visitors (Policy No. 16).

Maintain the County's inventory of areas of potential cultural and archaeological significance (Implementation G).

Fish and Wildlife

Encourage programs to locate and determine populations of rare and endangered species (Implementation, P. 85).

San Luis Obispo General Plan: Land Use, Circulation Elements **Environment**

Maintain and protect a living environmental that is safe, healthful and pleasant for all residents by conserving nonrenewable resources and replenishing renewable resources (Policy No. 1).

Balance the capacity for growth allowed by the Land Use element with the sustained availability of resources (Policy No. 2).

Table 8.4-2. (Continued) **Authority Category Policy** San Luis Obispo General Plan: Land Use, Circulation Elements Preserve and protect the air quality of the county be seeking to attain and maintain Air Quality state and federal ambient air quality standards (Policy No. 3). Determine, and mitigate where feasible, the potential adverse air quality impacts of new development (Policy No. 4). Minimize the generation of air pollutants from projected growth by implementing land use policies and programs that promote and encourage the use of transportation alternatives to the single-passenger vehicle and minimize travel distance and trip generation (Policy No. 5). Provide for a sustainable rate of orderly development within the planned capacities **Population Growth** of resources and services and the county's and citizens' financial ability to provide them (Policy No. 6). Distribution of Land Encourage an urban environment that is an orderly arrangement of buildings, Uses structures and open space appropriate to the size and scale of development for each community (Policy No. 7). Maintain a distinction between urban and rural development by providing for rural uses outside of urban and village areas which are predominantly agriculture, lowintensity recreation, residential and open space uses, which will preserve and enhance the pattern of identifiable communities (Policy No. 8). Identify important agricultural, natural and other rural areas between cities and communities and work with landowners to maintain their rural character (Policy No. 9). Encourage the protection of agricultural land for the production of food, fiber, and other agricultural commodities (Policy No. 10). Phasing of Urban Design and maintain a land use pattern and population capacity that is consistent **Development** with the capacities of existing public services and facilities, and their programmed expansion where funding has been identified (Policy No. 11). Encourage the phasing of urban development in a compact manner, first using vacant or underutilized "infill" parcels and lands next to existing development (Policy No. 12). Commercial and Design a pattern of strategically located commercial and/or industrial areas **Industrial Land Uses** compatible with overall land use that is convenient to patrons, realistically related to market demand and the needs of the community, and near areas designated for residential use (Policy No. 14). **Public Services and** Provide additional public resources, services and facilities to serve existing **Facilities** communities in sufficient time to avoid overburdening existing resources, services and facilities (Policy No. 15).

areas (Policy No. 18).

Locate new and additional public service facilities on existing public lands where feasible, allowing for sufficient buffers to protect adjacent rural and agricultural

Table 8.4-2. (Continued)

Authority Category

Policy

San Luis Obispo General Plan: Land Use, Circulation Elements Energy Discretionary projects should include in

Discretionary projects should include in their project description measures proposed to maximize energy conservation and a discussion of the potential energy impacts of the project (Policy No. 18).

Facilities shall be sited and constructed in a manner to protect the public from potential hazards and significant environmental impacts (Policy No. 29).

The development of sustainable energy resources and renewable energy projects shall be encouraged (Policy No. 37).

Encourage the use of solar electric power generating facilities, especially in areas remote from utility services and in places where such systems can meet specialized power needs cost effectively (Policy No. 38).

Encourage and support the development of solar power systems as commercial energy enterprises where visual and environmental impacts can be mitigated (Policy No. 39).

Encourage waste-burning biomass facilities as a method of producing electrical energy where environmental and air quality impacts can be mitigated and the facility is compatible with adjoining uses (Policy No. 40).

Encourage cogeneration facilities as a method of reducing overall energy use. Energy will be used more efficiently because both electricity and as process heat are produced (Policy No. 45).

In cases where a cogeneration facility does not meet the criteria for an exemption from an environmental determination, review both for environmental and fiscal impacts of development (Policy No. 46).

Distributed utility facilities should be encouraged because they may significantly increase the efficiency of the power system and may increase the use of local renewable fuel sources. They may also reduce environmental impacts and increase the economic well being of the county (Policy No. 47).

Encourage the development of small-scale power generating facilities which have substantially fewer environmental, social, and economic impacts. Such facilities could provide energy for local use, assist in the development of a more distributed utility, and may include solar, wind, biomass, and other renewable energy technologies (Policy No. 48).

Proposals for new transmission lines shall be evaluated for alternatives that significantly reduce their visibility and impacts to sensitive environmental resources (Policy No. 49).

As part of the siting analysis, proposals for new corridors should consider the following preferences to minimize impacts: ... projects that upgrade or modify existing lines ...[,] corridor consolidation with existing lines ...[, or as] the least preferred option ... entirely new corridors (Policy No. 50).

Existing access roads should be used wherever possible to avoid unnecessary disturbance of vegetation. (Policy No. 51).

Proposed new or major additions to fossil fuel facilities must provide a sufficient buffer zone from existing or proposed human population, with special consideration given to those who cannot be quickly evacuated to safety, such as the disabled and elderly. To establish a buffer zone, a comprehensive risk analysis should be completed (Policy No. 52).

Table 8.4-2. (Continued)

Authority Category

Policy

San Luis Obispo General Plan: Land Use, Circulation Elements

Energy (Continued)

Encourage the upgrade or replacement of existing, older facilities to current safety and environmental standards (Policy No. 53).

In an effort to decrease redundancies, coordinate with state and federal agencies to promote an information exchange about safety standards, regulation, and strategies to pursue in order to minimize the safety hazards from fossil fuel facilities (Policy No. 54).

BLM - Caliente Resource Management Plan 2

All lands in the resource area must be managed to provide healthy, sustainable, biologically diverse ecosystems

BLM must manage public lands so that soils exhibit functional biological and physical characteristics that are appropriate to soil type, climate, and land form.

BLM must manage public lands to maintain or enhance healthy, productive, and diverse populations of native species, including special status species.

BLM must manage public lands so that riparian and wetland vegetation, structure and diversity and stream channels and floodplains function properly and achieve advanced ecological status.

BLM must manage public lands so that surface and groundwater quality comply with California or other appropriate water quality standards.

BLM must manage public lands by integrating management objectives with those of local county governments, state agencies, and other federal agencies to contribute to regional conservation efforts.

BLM must increase cooperation with management partners to integrate the isolated parcels with other natural resources and open space management programs.

Source: Kern County, 1982 [1994]; San Luis Obispo County, 1980c [1999]; BLM, 1996. The management objectives guide the BLM's land use management decisions.

Table 8.4-3. Kern County and San Luis Obispo County General Plan Land Use Designations¹

Kern County Land Use Designation	Definition
Non-Jurisdictional Land	
• State or Federal Land (1.1)	All property under the ownership and control of various state and federal agencies.
• Incorporated Cities (1.2)	All property under the ownership and control of various cities.
Public Facilities	
• Solid Waste Facilities (3.4)	Includes existing or planned public, semi-public, or private solid waste facilities. Permitted uses include, but are not limited to, the following:
	 Primary: Sanitary landfills, large-volume transfer stations, waste-to-energy facilities, and nonhazardous oily waste disposal fields.
	 Compatible: Small-volume transfer stations and septic disposal fields.
Special Treatment Areas	
• Rural Community (4.2)	• Applies to settlements in the County that have individual character which should be addressed at a Specific Plan level of detail. The General Plan includes Interim Rural Community Plan Maps which are in effect until formal Specific Plans are adopted. Land Use Guidelines and requirements are provided to direct development of residential, commercial, industrial, open space, institutional and public service facilities land uses.
Industrial	
• Heavy Industrial (7.3)	Includes large-scale industrial activity which is incompatible with other land uses because of potential severe environmental impacts and/or high employee densities. Permitted uses include, but are not limited to, the following:
	 Primary: Manufacturing, assembling and processing activities, transportation facilities, material and equipment storage, sawmills, foundries, refineries, and petroleum product storage.
	 Compatible: Most commercial uses, less intensive industrial uses, including agricultural industries, both intensive and extensive agricultural production, and mineral and petroleum exploration and extraction, and single-family residential, if previously zoned for such use.

Kern County Land Use Designation	Definition	
Resource		
• Extensive Agriculture (20-Acre Min.) (8.3)	Applies to agricultural uses involving large amounts of land with relatively low value-per-acre yields. Minimum parcel size is 80 acres gross, except lands not under Williamson Act Contract, in which case the minimum parcel size must be 20 acres gross. Permitted uses include, but are not limited to:	
	 Primary: livestock grazing, dry land farming, ranching facilities, wildlife and botanical preserves, timber harvesting, etc.; one single-family dwelling unit. 	
	 Compatible: irrigated croplands, water storage or ground water extraction, recharge areas, mineral and petroleum exploration, recreational activities, etc. 	
• Mineral and Petroleum (5 Acre Min.) (8.4)	Applies to area, which contains producing, or potentially productive, petroleum fields and mineral deposits. Uses are limited to activities directly associated with resource extraction. Minimum parcel size is 5 acres gross. Permitted uses include, but are not limited to:	
	Primary: mineral and petroleum exploration and extraction.	
	 Compatible: extensive and intensive agriculture, mineral and petroleum processing, pipelines, power transmission facilities, communication facilities, equipment storage yards, and one single-family dwelling unit (subject to a Conditional Use Permit). 	
Physical Constraints Overlay	Includes overlay zones denoting physical constraints. Development within these areas is subject to review by the County and will include conformity with adopted ordinances. Those applicable include	
• Seismic Hazard (2.1)	Seismic Hazard: Includes the Alquist-Priolo Special Study Zone and other active fault zones.	
• Steep Slope (2.4)	Steep Slope: Includes land with an average slop of 30 percent or steeper.	
• Flood Hazard (2.5)	• Flood Hazard: Based on the Flood Hazard Boundary Maps of the US Department of Housing and Urban Development and the Kern County Water Agency. These areas include, for example, flood channels and water courses, riverbeds, and gullies.	
San Luis Obispo County Land Use Designation	Definition	
Rural Land	Applies to areas to encourage a) rural development at very low densities that maximizes preservation of open space, watershed and wildlife habitat areas, b) retention of large parcel sizes where rural residences may be established on lands having open space value but limited agricultural potential, or c) establishment of areas where non-agricultural activities are the primary use but where agriculture and compatible uses may co-exist.	

Table 0.4-3. (Continued)		
San Luis Obispo County Land Use Designation	Definition	
Flood Hazard (FH) Combining District	Combining designations are special overlay categories applied in areas of the county with hazardous conditions, in this case an area prone to flooding, where more detailed project review is needed to avoid adverse environmental impacts or effects of hazardous conditions on proposed projects.	
Sensitive Resource Area (SRA) Combining District	Combining designations are special overlay categories applied in areas of the county with hazardous conditions or special resources where more detailed project review is needed to avoid adverse environmental impacts or effects of hazardous conditions on proposed projects. In the Shandon-Carrizo rural area where the sensitive resource area designation is applied three additional standards apply:	
	 Resource extraction and new construction is not permitted within the Soda Lake SRA. 	
	 New development within BLM wilderness study areas is allowed only in accordance with the Federal Land Policy and Management Act of 1976. 	
	 Off-road vehicles are prohibited except on designated trails in BLM lands. 	

The land use designations identified have been summarized, and only those designations directly affected by the proposed South Star project are discussed.

Sources: Kern County, 1982 [1994]; San Luis Obispo County, 1980c [1999].

Table 8.4-4. Zoning Designations Within the Affected Environment¹

Project Component	Zoning Designation ²
South Star I Project Site	A-1 (Kern County)
South Star II Project Site	A-1 (Kern County)
Proposed Electrical Transmission Line	A-1 (Kern County) RL FH (San Luis Obispo County) RL (San Luis Obispo County) A (Kern County)
Segment 'A' and 'B' Proposed Natural Gas Pipeline Route (TCI South Midway Utility Corridor)	A-1 (Kern County) NR (20) (Kern County)
Proposed Natural Gas Pipeline Route	A-1 (Kern County)
Alternate Route 1 (Natural Gas)	A-1 (Kern County)
Alternate Route 2 (Natural Gas)	A-1 (Kern County)

The affected environment consists of that area within one mile of the generating plant site and within a one-half mile corridor centered on the proposed transmission route and water supply route (one-quarter mile to either side).

Sources: Kern County, 2001a; San Luis Obispo County Assessor's Office, 2001.

These abbreviated zoning designations correspond with the descriptions given Table 8.4-5.

Table 8.4-5. Zoning Districts Within the Study Area		
Kern County Zoning District	Definition	
Exclusive Agriculture (A)	This designation is intended to preserve agricultural land and to prevent premature conversion of agricultural land to other uses. Transmission lines, towers and poles, underground utilities and utility substations are a permitted use.	
Limited Agriculture (A-1)	This designation identifies areas suitable for a combination of estate- type residential development, agricultural uses and other compatible uses. Transmission lines, towers and poles, underground utilities and utility substations are a permitted use.	
Natural Resource (NR(20))	This designation identifies lands that contain productive or potentially productive petroleum, mineral or timber resources and to prevent encroachment of incompatible uses. Transmission lines, towers and poles, underground utilities and utility substations are a permitted use.	
Floodplain Combining District (FP)	This combining designation identifies areas that are potentially subject to flooding.	
Geologic Hazard Combining District (GH)	This combining designation identifies areas that are subject to or potentially subject to surface faulting, ground shaking, ground failure, landslides, mudslides, or other geologic hazards.	
San Luis Obispo Zoning District	Description ¹	
Rural Land (RL)	This designation identifies lands having open space value but limited agricultural potential. Transmission lines, towers and poles are a permitted use, subject to special standards. Land Use Ordinance, \$22.08.286 ff.	
Flood Hazard Combining District (FH)	A combining designation which is applied in areas prone to flooding. Combining designations are applied in addition to land use categories.	
Sensitive Resource Area (SR)	A combining designation which is applied in areas with special resources where more detailed project review is needed to avoid adverse environmental impacts. Combining designations are applied in addition to land use categories.	

Table 8.4-6. Landowners Along the Proposed Transmission and Pipeline Routes

Assessor's Parcel Number	Owner(s)
183-220-26	Texaco California Inc.
183-220-29	Texaco California Inc.
183-220-48	BLM
183-220-66	BLM
198-020-06	Chevron USA Inc.
198-020-07	Chevron USA Inc.
198-020-09	Texaco California Inc.
198-040-04	Texaco California Inc.
198-040-06	Texaco California Inc.
198-130-01	BLM
198-130-03	Texaco California Inc. (South Star I site)
198-140-01	Texaco California Inc.
198-140-03	BLM
198-140-06	BLM
198-140-19	City of Taft
198-180-06	Texaco California Inc.
198-180-07	Aera
198-180-08	Aera
198-180-09	Texaco California Inc.
198-180-12	Aera
198-180-41	Texaco California Inc. (South Star II site)
198-200-01	Texaco California Inc.
095-291-001	Texaco California Inc.
095-291-002	Texaco California Inc.

Table 8.4-7. General Plan Land Use Designations Within the Study Area¹

Project Component	General Plan Land Uses ²
South Star I	Limited Agricultural (Kern County)
South Star II	Limited Agricultural (Kern County)
Proposed Transmission Line Route	Limited Agricultural (Kern County) Rural Lands (Flood Hazard Combining) (San Luis Obispo County) Rural Lands (San Luis Obispo County) Exclusive Agricultural (Kern County)

The study area consists of that area within one mile of the generating plant site and within a one-half mile corridor of the proposed transmission and natural gas pipeline routes. General plan land use designations are defined in Table 8.4-3.

Jurisdiction	Authority	Administering Agency	AFC Conformance Section
Federal	Caliente Resource Management Plan	Bureau of Land Management (BLM)	8.4.2.3
	Federal Land Planning Management Act	BLM	8.4.4.3
State	Williamson Act, California Government Code §§ 51200-51295	Department of Conservation, Office of Land Conservation	8.4.2.2
	California Environmental Quality Act, Public Resources Code §§ 21000-21177	California Energy Commission (CEC)	AFC in its entirety
	PRC § 25523(a); 20 CCR §§ 1752, 1752.5, 2300-2309, and Chapter 2 Subchapter 5, Appendix B, part (i)(3) and (4)	CEC	8.4.2.1
Local	Kern County General Plan	Kern County Planning Commission	8.4.3, 8.4.4, and 8.4.5
	San Luis Obispo County General Plan	San Luis Obispo Planning Commission	8.4.3, 8.4.4, and 8.4.5
	Kern County Zoning Ordinance	Kern County Planning Commission	8.4.3, 8.4.4, and 8.4.5
	San Luis Obispo Land Use Ordinance	San Luis Obispo Planning Commission	8.4.3, 8.4.4, and 8.4.5
	Kern County Land Division Ordinance	Kern County Planning Commission	8.4.3, 8.4.4, and 8.4.5
	San Luis Obispo Real Property Division Ordinance	San Luis Obispo Planning Commission	8.4.3, 8.4.4, and 8.4.5
Work Peri	Kern County Permit for Work Performed in a Right-of-Way	Kern County Public Works Department	8.4.3, 8.4.4, and 8.4.5
	Kern County Encroachment Permit for Installation of Pipelines Beneath a Transportation Corridor	Kern County/City of Taft Public Works Department	8.4.3, 8.4.4, and 8.4.5

Table 8.4-9. Schedule of Other Required Permits/Approvals

Permit/Approval	Project Component	Responsible Agency	Schedule
Right-of-way	Proposed Transmission	BLM	Concurrently,
	Line, Proposed and		August, 2001
	Alternate Natural Gas		•
	Pipeline, Proposed		
	Natural Gas Pipeline		
	(TCI South Midway		
	Utility Corridor)		















